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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/805,876	03/22/2004	Gene Probasco	61842CIP(51035)	9875
21874	7590	09/16/2009		
EDWARDS ANGELL PALMER & DODGE LLP			EXAMINER	
P.O. BOX 55874			LEVY, NEIL S	
BOSTON, MA 02205				
			ART UNIT	PAPER NUMBER
			1615	
			MAIL DATE	DELIVERY MODE
			09/16/2009	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/805,876	<b>Applicant(s)</b> PROBASCO ET AL.	
	<b>Examiner</b> NEIL LEVY	<b>Art Unit</b> 1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3,5 and 7-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5 and 7-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                      |                                                                   |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____                                                          | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

The double patenting and Souter rejections are withdrawn.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### ***Claim Rejections - 35 USC § 112***

Claims 1-3,5 ,7-13 STAND rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Absent any description or identification of liquid soap, anything constituting generally recognized function as detergent, surfactant, cleanser, emulsifiers can be construed as liquid soap, such as the Ivory liquid soap (column 3, bottom of Locke.).

The method for controlling spider mites is not indicative of support; the data supporting 1% beta acids shows more mites on treated than control. For example treatment on 6/20 had 6 control mites and 200 gallons and 12 on the 100 gallon treated; after treatment, there were 26- of the 200 gallon and 27-of the 100 gallon mites. They multiplied; the beta acids at 1% seemed to be a mite attractant. The same effect on June 26; on July 3 there were more mites and more than at control. 200 gallon treatment July 10 decreased by ½ the mites, while 100 gallon increased them by 4

times; both greater than control. Only the 7<sup>th</sup> treatment, August 15, decreased the mites at 200 gallon; but by 8/26 they were back in greater number than control. This does not correspond with the statement that after every application there was a 100% kill (page 12).

***Claim Rejections - 35 USC § 103***

Claims 1 -3, 5, 7—13 stand rejected under 35 U.S.C. 103(a) as being unpatentable over JONES '98 thesis in view of LOCKE et al 5372817.

LOCKE at chapter 2 studies beta acids effects on spider mites. Beta acids (page 37) were at 10%, 1%, and 0.1% (2.2.3). The conclusion was that the beta acids functioned as a repellent (page 66). Direct application was fatal, but less so than from neem seed extracted azadirachtin (page 65).

Thus, combination of JONES hops beta acids with LOCKE neem seed compositions would be expected to increase the efficacy of killing and repelling plant pests.

LOCKE (column 2, line 48; column 3, line 5) applies safer pesticides to control fungus and insects (column 5, lines 24-26) on plants, applied as a liquid soap (column 4, bottom) with other safe insecticides and surfactants (column 5, lines 35-41) like the Tweens (column 6, lines 14-18) or tritons and liquid soaps (col. 3, bottom).

One in the art would find it obvious to provide B acids with other plant extracts of and soaps of LOCKE in order to provide non-target safe anti-mildew, anti-spider mite liquid compositions.

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It would have been obvious to a person of ordinary skill in the art at the time the invention was made desiring to utilize natural compounds as pesticides, to use the Beta acids of Jones, to control mites and aphids of crops using emulsified solutions as of LOCKE in order to provide a natural product- one treatment means to control mites, Aphids, and bacteria with sprayable forms emulsified.

There is no distinguishing disclosure of the instant composition as providing an unusual and/or unexpected results obtained since the prior art is well aware of the use of hops and extracts thereof as pesticides.

The selection of the instant non-critical pest control ingredients and concentrations are result effective parameters chosen to obtain the desired effects. It would be obvious to vary the concentration each ingredient to optimize the effect desired and the use of ingredients for the functionality for which they are known to be used is not a basis for patentability.

### ***Response to Arguments***

Applicant's arguments filed 6/4/ 09

have been fully considered but they are not persuasive. Applicant argue JONES '96 did not apply hop acid's and LOCKE did not either. Examiner finds a more detailed presentation as JONES thesis, and LOCKE did use emulsifiers and soap. The suggestion by JONES to incorporate neem is sufficient to warrant combination

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to NEIL LEVY whose telephone number is 571-272-0619. The examiner can normally be reached on Tuesday-Friday, 7 AM to 5:30 PM EST..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MICHAEL WOODWARD can be reached on 571-272-8373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

9/12/09

/NEIL LEVY/  
Primary Examiner, Art Unit 1615

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